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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,637	12/01/2000	Robert Medsker	GT-5241 (GC-FK-CIP)	2395

28862 7590 04/22/2003

HUDAK, SHUNK & FARINE, CO., L.P.A.  
2020 FRONT STREET  
SUITE 307  
CUYAHOGA FALLS, OH 44221

EXAMINER

ZALUKAEVA, TATYANA

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 04/22/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

HC

<b>Office Action Summary</b>	<b>Application No.</b> 09/727,637	<b>Applicant(s)</b> MEDSKER ET AL.	
	<b>Examiner</b> Tatyana Zalukaeva	<b>Art Unit</b> 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) 23-74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-74 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>17</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on January 13, 2003 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,403,760 has been reviewed and is accepted. The terminal disclaimer has been recorded.
2. It is suggested that typo in claim 18, "ally" be changed for "allyl"

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

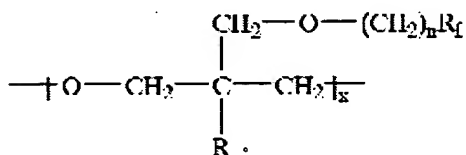
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Malik et al (6,448,368)

Malik discloses a hydroxyterminated FOX prepolymer and compositions containing such prepolymer represented by formula

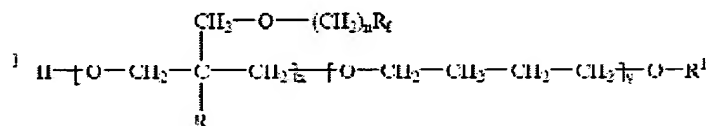
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herein each n is independently selected and is a number from 1 to 3; each R independently is independently selected from the group consisting of methyl and ethyl; each R<sub>f</sub> is independently selected from the group consisting of linear and branched perfluorinated alkyls and isoalkyls having from 1 to about 20 carbons, and oxaperfluorinated polyethers having from 4 to about 60 carbons; and x is about 10 to about 250 (col. 9, lines 60-62, claim 18, col. 22, line 50, col. 25, lines 57-64, col. 26, line 55, col. 31, 32).26, line 55, col. 31, 32).

The FOX copolymer is disclosed in particular in col. 22, line 50

According to malik the termination group R<sub>1</sub> can be derived from initiator solvent that can be is selected from the group consisting of ethylene glycol; butane-1,4-diol; propylene glycol; isobutane-1,3-diol; pentane-1,5-diol; pentaerythritol; trimethylolpropane, **trifluoroethanol** and mixtures of at least two thereof (claim 22), and the process of Malik further comprises recovering as a reaction product said FOX



prepolymer composition.

<sup>13</sup>C NMR analysis of the co-prepolymers revealed that these materials are random copolymers with little, if any, block structure.

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Rf is denoted to be a perfluorinated alkyl group having 1-20 carbon atoms. By the definition of perfluorinated it means that all hydrogens are substituted by fluorines, i.e. 100% of non carbon atoms are fluorine atoms, as per instant claim 19.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

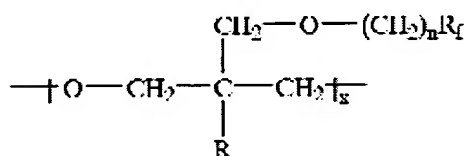
7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

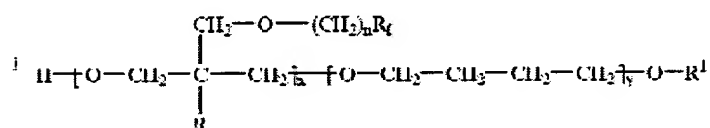
8. Claims 1-14 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malik et al (U.S. 6,448,368)

Malik discloses a hydroxyterminated FOX prepolymer and compositions containing such prepolymer represented by formula



herein each n is independently selected and is a number from 1 to 3; each R independently is independently selected from the group consisting of methyl and ethyl; each R<sub>f</sub> is independently selected from the group consisting of linear and branched perfluorinated alkyls and isoalkyls having from 1 to about 20 carbons, and oxa-perfluorinated polyethers having from 4 to about 60 carbons; and x is about 10 to about 250 (col. 9, lines 60-62, claim 18, col. 22, line 50, col. 25, lines 57-64, col. 26, line 55, col. 31, 32).26, line 55, col. 31, 32).

The FOX copolymer is disclosed in particular in col. 22, line 50



This copolymer is readable on the copolymer of the instant claims .

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<sup>13</sup> C NMR analysis of the co-prepolymers revealed that these materials are random copolymers with little, if any, block structure.

The disclosure of Malik differs from the instant claims 1-14 and 20-22 by not specifying the amount of a “prepolymer” or “oligomer” in the composition.

However, it is first noted that the instant claims provide the amounts not limited on their lower range, and do not recite any other compounds in the composition. Therefore, the oligomer or prepolymer is a composition itself. Since the compositions of Malik are identical to those instantly claimed, and since they are used for analogous purposes as those described in the instant specification, a person skilled in the art would have found it obvious to adjust the content of a polymer depending on its intended use with the reasonable expectation of success lacking showing the criticality of the claimed ranges on this record.

9. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on February 19, 2003 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the


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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tatyana Zalukaeva whose telephone number is (703)305-8819. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

  
**Tatyana Zalukaeva, Ph.D.**  
**Primary Examiner**  
**Art Unit 1713**

Tatyana Zalukaeva  
Primary Examiner  
Art Unit 1713

April 21, 2003